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Advisory Board on Radiation and Worker Health – Meeting 38

National Institute for Occupational Safety and Health

U.S. Senator Maria Cantwell

Statement for the Record

June 16, 2006

Thank you for the opportunity to submit testimony to the Advisory Board on Radiation and Worker Health with regard to the Hanford nuclear facility in Richland, Washington. Since Upton Sinclair exposed the atrocious labor conditions in the meatpacking industry in his book, "The Jungle," over one hundred years ago, the United States has made genuine progress in protecting workers from unsafe occupational conditions. We have strengthened labor laws to control hours and pace of work, and ensure adequate compensation benefits for workers. Especially with regard to employee radiation hazards, regulations exist to protect workers by limiting permissible exposures to hazardous chemicals and ionizing radiation.

I recognize the hard work and tremendous sacrifice nuclear weapons and atomic energy workers have made for our nation's defense and security. I am proud to have worked to change to the Energy Employees Occupational Illness Compensation Program Act (EEOICPA), enacting Part E of the program now administered under the Department of Labor. Under EEOICPA, the Board must review the scientific validity and quality of the National Institute for Occupational Safety and Health's (NIOSH) dose reconstructions. Among other responsibilities, the Board reviews NIOSH's evaluation of petitions for special exposure cohort status and recommends whether such status should be granted. I want to thank Chairman Ziemer and members of the Board for your leadership. You determine the relationship between exposure and its health effects, using only the best available scientific evidence and in doing so, ensures the integrity of the program.

The Board was very responsive to my requests that the Hanford review process move forward, and I look forward to working with the Board to resolve worker compensation issues at Hanford. As you are aware, the Sanford Cohen & Associates (SC&A) independent review of the NIOSH site profile of the Hanford nuclear facility was released a year ago. Based on the June 10, 2005 report, I have raised concerns that the dosimetry data available for certain Hanford workers is insufficient to make an appropriate determination for workers compensation under the EEOICPA program. Sufficient information to perform dose reconstruction, is essential to determining workers' Special Exposure Cohort (SEC) eligibility. SC&As findings suggest several instances where thousands of workers should be included into the SEC category. I will continue to request that the Board recognize that certain Hanford workers qualify for a Special Exposure Cohort designation.

The Hanford plant located in southeastern Washington state was established in the early 1940s. At that time, the plant was built for the manufacture chemical separation, and

purification of plutonium. Annual records of radiation exposure have been obtained from dosimeters worn by employees. These data reflect estimates of exposure to several types of ionizing radiation. Moreover, there have been numerous studies on populations' occupational exposure to radiation at the Hanford site, including Gilbert & Marks (1979), Tolley et al. (1983), Mancuso, Stewart & Kneale (1977), Kneale, Mancuso & Stewart (1981, 1984), Hutchinson et al. (1979) and Darby & Reissland (1981). There is no doubt that the Hanford plant has employed many people, especially before 1972, in work involving some exposure to radiation.

The concerns raised by former and current nuclear workers about the data used to determine eligibility for compensation are not unique to my constituents at the Hanford site in Richland, Washington. Without a doubt, dose reconstruction is a complex process that involves rebuilding a worker's history of radiation based on individual dose records as well as other site documentation. To receive workers compensation for an occupational illness, a worker must prove that the specific condition was caused by a particular job exposure.

When an illness has a long latency period, workers may be unable to remember what substances, hazardous or not, they were exposed to twenty-odd years earlier. Frequent changes in work or work practices complicate the matter further. Without a complete work history, and knowledge of specific occupational hazards, it will be difficult to correlate symptoms and causes. In other words, the burden of proof is on the claimant, and the outcome depends on how much certainty is required. That said, questions about the Hanford radiation dosimetry data based on the SC&A review, lend support to a Special Exposure Cohort status for these workers.

According to SC&A review of the Hanford Site Profile, neutron exposure among many Hanford workers contributed a large portion of the total dose from external radiation. For example, neutron exposure dominated for 100, 200 and 300 area workers at Hanford. However, findings from the SC&A report claim that neutron exposure to reactor workers are not adequately characterized as a result of unmonitored exposure to neutron sources in operations such as separations, HLW tanks and burial sites, and R&D facilities, among other issues. As such, there is a high potential for worker exposure to neutrons due to the historic design and operation of reactors. Additionally, not all reactor operations personnel were monitored for neutrons, and a number of non-reactor facilities with potential for neutron exposure that were not addressed in the Technical Basis document.

While there were other findings from the SC&A review of the Hanford Site Profile, I understand the Advisory Board has formed a working group to facilitate further discussion of these findings between SC&A and Oak Ridge Associated Universities, the contracting agency which authored the Hanford Site Profile. I respectfully request members of the Hanford working group to brief my staff on the status of these discussions.

In conclusion, I want to take this time to revisit a major goal of EEOICPA: to provide "timely, uniform, and adequate" compensation to these workers. The role of the

Advisory Board is to provide quality control and raise public confidence in the fairness of the claims process. While I recognize that determining the eligibility of worker compensation is a difficult task, time is of the essence. I have met with far too many sick Hanford workers who need medical help and, more importantly, deserve compensation.

The SEC designation was created expressly for situations in which data needed for the dose reconstruction process fails to exist. The independent review of the NIOSH site profile of the Hanford nuclear facility suggest several instances where thousands of workers should be included into the SEC category due to the lack of such data. Because of this, I reiterate my request that the Board give particular consideration that certain Hanford workers qualify for a Special Exposure Cohort designation.

Again, I thank the Board for allowing me to submit testimony to the Board and I look forward to continue working with the Board to resolve worker compensation issues at Hanford.